

U.S. Department of the Interior • Bureau of Land Management • Washington, D.C., Office • 1849 C Street N.W. • Washington, D.C.

Renewable Energy and the BLM: SOLAR

Solar radiation levels in the Southwest are some of the best in the world, and the BLM manages more than 19 million acres of public lands with excellent solar energy potential in 6 states: California, Nevada, Arizona, New Mexico, Colorado and Utah. State renewable energy portfolios, investment tax credits for solar energy projects, volatile oil prices, and international concern about global warming have all contributed toward public and industry interest in utility-scale solar energy development. Solar energy projects can provide significant amounts of electricity while emitting virtually no greenhouse gases, but they require large areas of relatively flat land, and some technologies use substantial amounts of water—a scare commodity in the arid climates where the solar resources are the best. At this time, there are about 80 solar energy projects, totaling some 630,000 acres, proposed on public land primarily in Arizona, California, and Nevada.

Solar energy development projects on BLM-administered public lands are authorized as rights-of-way under Title V of the Federal Land Policy and Management Act if the proposed project is consistent with BLM land use planning. The applicant is required to pay the BLM's costs in processing the right-of-way application, and all projects require an environmental review under the National Environmental Policy Act. Any entity that receives a solar energy right-of-way authorization must comply with the terms and conditions of the authorization and pay fair market value for use of the public lands.

In 2010, the BLM approved the first utility-scale solar energy projects on public lands. To date, it has approved 11 projects that include all of the solar energy technologies considered to be commercially viable (parabolic trough, power tower, dish engine, and photovoltaic systems). These 11 projects have the potential to generate 4,512 megawatts of clean, renewable energy - enough energy to power roughly 1.3 million homes. The projects range in size from a 45-megawatt photovoltaic system on 422 acres to a 1,000-megawatt parabolic trough system on 7,025 acres. In 2011 and 2012, the BLM also approved rights-of-way for electric transmission lines on public lands that will enable the construction of six additional projects on private and Tribal land. Those projects will generate another 1,475 megawatts.

Just as with oil and gas production, not all BLM-administered lands are available for alternative energy production. Lands designated as part of the BLM's National Landscape Conservation System are not open to solar energy development. In addition, some special management areas such as Areas of Critical Environmental Concern may not be suitable for development. These areas are generally identified in existing BLM land use plans.

In October 2012, Secretary of the Interior Ken Salazar signed the Record of Decision finalizing a program for spurring development of solar energy on public lands in six western states. The Programmatic Environmental Impact Statement (PEIS) for solar energy development provides a blueprint for utility-scale solar energy permitting in Arizona, California, Colorado, Nevada, New Mexico and Utah by establishing solar energy zones with access to existing or planned transmission, incentives for development within those zones, and a process through which to consider additional zones and solar projects. The Solar PEIS establishes an initial set of 17 Solar Energy Zones (SEZs), totaling about 285,000 acres of public lands, that will serve as priority areas for commercial-scale solar development, with the potential for additional zones through ongoing and future regional planning processes. If fully built out, projects in the designated areas could produce as much as 23,700 megawatts of solar energy, enough to power approximately 7 million American homes. The program also keeps the door open, on a case-by-case basis, for the possibility of carefully sited solar projects outside SEZs on about 19 million acres in "variance" areas.